



THE UNIVERSITY *of* EDINBURGH

## Edinburgh Research Explorer

### Open online spaces of professional learning

**Citation for published version:**

Evans, P 2015, 'Open online spaces of professional learning: Context, personalisation and facilitation', *TechTrends*, vol. 59, no. 1, pp. 31-36. <https://doi.org/10.1007/s11528-014-0817-7>

**Digital Object Identifier (DOI):**

[10.1007/s11528-014-0817-7](https://doi.org/10.1007/s11528-014-0817-7)

**Link:**

[Link to publication record in Edinburgh Research Explorer](#)

**Document Version:**

Peer reviewed version

**Published In:**

TechTrends

**Publisher Rights Statement:**

©Evans, P. (2015). Open online spaces of professional learning: Context, personalisation and facilitation. *TechTrends*, 59(1), 31-36. [10.1007/s11528-014-0817-7](https://doi.org/10.1007/s11528-014-0817-7)

**General rights**

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

**Take down policy**

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact [openaccess@ed.ac.uk](mailto:openaccess@ed.ac.uk) providing details, and we will remove access to the work immediately and investigate your claim.



This is an Author Accepted Manuscript (AAM) of

Evans, P. (2015). Open online spaces of professional learning: Context, personalisation and facilitation. *TechTrends*, 59(1), 31-36. [10.1007/s11528-014-0817-7](https://doi.org/10.1007/s11528-014-0817-7)

Please cite the published article in references.

## **Open online spaces of professional learning: context, personalisation and facilitation**

Peter Evans

Digital Education, University of Edinburgh

[peter.evans@ed.ac.uk](mailto:peter.evans@ed.ac.uk)

Moray House School of Education

University of Edinburgh

Edinburgh

EH8 8AQ

UK

Keywords: assemblage, community, professional learning, social media,

Twitter

### Abstract

This article explores professional learning through online discussion events as sites of communities of learning. The rise of distributed work places and networked labour coincides with a privileging of individualised professional learning. Alongside this focus on the individual has been a growth in informal online learning communities and networks for professional learning and professional identity development. An example of these learning communities can be seen in the synchronous discussion events held on Twitter. This article examines a sample of these events where the interplay of personal learning and the collaborative components of professional learning and practice are seen, and discusses how facilitation is performed through a distributed assemblage of technologies and the collective of event participants. These Twitter-based events demonstrate competing forces of newer technologies and related practices of social and collaborative learning against a rhetoric of learner autonomy and control found in the advocacy of the personalisation of learning.

## Introduction

This article explores the implications of digital technologies and networked labour (Castells, 2000; Scholz, 2013) for professional learning. The pervasiveness of digital networked technologies has contributed to the growth of distributed work practices alongside a privileging of individualised learning. Individual professionals are increasingly expected to take responsibility for their own professional development and learning activities.

Alongside this focus on the individual has been a growth in informal online learning communities and networks for professional learning and the promotion of professional identities. An example of these learning communities can be seen in the synchronous discussion events held on Twitter (Bingham & Conner, 2010; McCulloch, McIntosh, & Barrett, 2011). This article examines a sample of these events as sites where the interplay of personal learning and the collaborative components of professional learning and practice take place. In particular, it discusses how the facilitation of these events is performed through a distributed assemblage of technologies and the collective of event participants.

The term ‘assemblage’ is used here, as the linking of human and non-human components (such as text, images, ideas, user-interfaces, software functions or hardware) that, in coming together, generate particular effects or “perform a particular function” (Fenwick & Edwards, 2010, p12). Such an assemblage is a complex and active entanglement of social and material components that co-constitute one another so no component can be understood independently of the assemblage (Barad, 2003). This article argues that specific roles or functions in a learning event such as that of ‘facilitator’, are effects of these sociomaterial assemblages (Mutch, 2013) rather than of specific ‘designated’ individuals. So

the idea of learning as a social, collective (Conradie, 2014) and material endeavour (Fenwick & Landri, 2012) is asserted in the assemblage generated in these discussion events.

### Context: distributed labour and learning

Working lives are increasingly taking place in networked contexts as the spread of digital technologies generates new structures of distributed work (Castells, 2000; Donnelly, 2011; Scholz, 2013). Such networked and distributed work structures have placed a premium on labour flexibility and the capacity of the workforce to learn and change. Tams and Arthur (2010) concluded that to maintain and enhance their position in this emerging and precarious labour market, individual workers: “need to engage in external networks and build personal connections that *[make]* knowledge transfer and new learning possible” (p. 631).

This trend towards individuals taking responsibility for their learning is reinforced as employers increasingly focus on only providing training required for regulatory and legal compliance purposes (Marks & Huzzard, 2010).

As work practices become distributed, temporary and mobile, traditional models of professional learning that: “assume shared goals, proximity of fellow workers and the availability of mentors” (Malcolm & Plowman, 2014, p. 1) are increasingly less relevant. Professional learning is becoming individualised and person-centred (Fenwick 2012) resulting in “self-programmable” workers that Castells (2000) characterises as having a capacity for change through self-directed learning. In turn, self-directed learning is made more realisable, visible and collaborative through social media technologies (Wagner et al., 2008) and the emergence of online learning communities sitting outside traditional organisational boundaries (McCulloch et al., 2011; Sloep, 2014).

Still there remains a wider public expectation that professional practice involves the reproduction of some form of common knowledge (Mäkitalo, 2012). Specialised knowledge

remains a key component of professional identity (Robinson, Anning, & Frost, 2005). Yet professional knowledge in general is changing from stable “bodies” of knowledge to more contingent and fluid forms of professional knowledge-in-practice that is mirrored in the informal complexities of learning communities and networks (Sloep, 2014). Professional knowledge is generated through the social sharing and refining ideas in a network or community with a common domain of interest (Sloep, 2014) rather than being transmitted by institutions. Furthermore, technologies used in such learning communities are not simply a means for the discussion of professional practice but also embody or enact that practice (McInerney, 2009). So, these communities assemble together people with digital network technologies engaged in professional identity generation in sites of professional learning.

### Context: Personalisation and PLEs

The focus on the digitally networked and “programmable” individual learner is reflected in the emergence of the notion of connectivism (Siemans, 2005) and the creation of Personal Learning Environments (PLEs) that are “in the control of the learner” (Fournier & Kop, 2010, no page). Connectivism is explained as “a learning theory for the digital age” (Siemens 2005) where learning occurs through the individual learner making connections between nodes in a network. A connection in this context is not a passive linking of nodes but involves a reciprocal relationship whereby a change in one node leads to a change in another (Downes, 2014). While learning depends on the diversity of social interactions across a network, the emphasis in connectivism is on the formation of personal and individual networks (Kop & Hill, 2008). Similarly, PLEs use network technologies to link learners with materials and services to support their learning, enabling the sharing of learning and feedback

from others (Kop, 2010; Wilson et al., 2009). A PLE can be seen as the operationalisation of connectivism.

The attention on the individual and personal in the discourse of the PLE is in tension with the idea of professional learning as a collective promotion of particular identities by legitimising certain practices within a given professional domain. Personal professional learning is constrained by how a wider learning network understands the learner's goals and intentions; how that network identified specific aspects of professional knowledge as legitimate; and how the technologies used may enact legitimated and illegitimated practices. So the assemblage of a learning network also facilitates the shaping, direction and "ownership" of the learning processes of the individual.

### The Twitter Discussion Events

These tensions are demonstrated in micro-blogging discussion events intended to support professional learning (Bingham & Conner, 2010; McCulloch et al., 2011). The discussion events, usually taking place on Twitter, are open to anyone using the internet. The synchronous events are organised through hashtags (#) to aggregate contributions and interactions (Bruns & Stieglitz, 2013). There are many such professional discussion events taking place including: #imcchat (integrated marketing communication); #innachat (innovation); #lrnchat (corporate and academic learning); and #talentnet (recruitment industry) (see Gnosis Media Group, n.d.).

Interactions in Twitter employ a number of functions of the application such as Replies; User Mentions; Retweets and hashtags. These functions are termed by Purohit et al., (2013) as "platforms" of conversation. These platforms contribute to the assemblages that facilitate the emergence of coherence in the dialogues during the events.

Two Twitter event series targeting professionals working in the education and learning sectors were selected for investigation in this article. The discussion events sampled occur on a weekly or fortnightly basis themed on broad topics of professional interest such as the use of learning technologies, learning communities, motivation and learning or learning analytics. Based on these themes, the discussion events foster collaborative learning spaces aligned to personal professional interests (Bradley & MacDonald, 2011) while simultaneously and constantly engaging in the collective renegotiation of those interests (Evans, 2014).

### The Event Structure

The structure of the discussion events is similar to “an online, open brainstorm-like session” or “Tweetstorm” (Sie et al., 2013, p. 60). This involves a six stage process moving from context and topic setting through the main event discussions followed by aggregation and analysis of the Tweets to arrive at agreed conclusions on the topic. However, in the case of these discussion events, the Tweets were not aggregated or analysed and so no common conclusions were reached. Rather, the events finished with simple ‘wrap up’ questions requesting individual views on the topic. So the social processes of negotiating meanings were not resolved in these events, reflecting the highly contingent and situated nature of personal professional learning.

[PLACE FIGURE 1 ABOUT HERE]

The role of the moderator or ‘official’ Twitter account was limited to Tweeting the set questions. So the events provide were ‘other-organised’ (Fiedler, 2014, p. 4) open learning opportunities without the input of the instructor or active facilitator that is often seen as



crucial to successful learning communities (Ala-mutka, 2009). Yet, many of the functions of the facilitation of learning can be seen being performed during the discussion events.

## Facilitation

### Facilitating behaviours

In discussing the facilitation of online learning, Wang, Anstadt, & Goldman (2014) state that:

Facilitation includes: (1) inspiring active involvement of all members and shaping of their useful roles, (2) attending to the explicit group process, (3) encouraging group communication, (4) summarizing and clarifying content of discussion, (5) acknowledging and connecting thoughts and feelings expressed, and (6) organizing the structure and format of the group. (p.140)

The facilitation of online learning tends to rely on active visibility (Mazzolini & Maddison, 2007) and presence (Rovai, 2007). While a visible facilitator was not seen to be meaningfully 'present', in these events, a number of participants do appear to jointly perform of the role of learning facilitator.

Active involvement in the event is encouraged by, for example, supportive Retweets:

Yes! 4 performance supp RT@OF: ... true potential big data is to get better at predictive analytics, than evaluating past

Or

RT @LG: #... Sometimes a gadget meant for one purpose is very effective in places it wasn't designed for! Great analogy

Group processes are attended to by, for example, mobilising the functions of the software and reminding participants to use the event hashtag:

@NG @OF you have to remember to put in #.... :-)

Also, when a participant requested a Retweet of the current discussion question as “*I need some level of structure*”, the responding Retweets came from other participants, not the ‘official’ event Twitter account.

In terms of supporting group processes and communication, Social Network Analysis (Jones 2013) shows how two participants in one of the event series had a crucial role in linking other individual participants and sub-groups within the overall event communities. Both were located in different subgroups of the discussion participants but through mobilising the Reply and Retweet functions of Twitter they generated links across the different networks of event participants.

[PLACE FIGURE 2 ABOUT HERE]

In terms of attending to groups processes, some facilitation practices acted to constrain the discussions by, for example, asserting the illegitimate status of a particular learning model:

Can we have another question to keep us from wasting time burying *[that model]*?

At other times, links of images were used to disparage or delegitimise certain professional practices such as off-the-job training. By such strategies, the learning community was binding the community to a particular professional identity and competences.

There was little evidence of the active clarifying and summarising of discussions during the course of the events. Some participants did engage different aspects of their PLEs by, for example, posting later reflections on the events on their own blogs as a form of retrospective coherence-making and reflective learning:

When reflecting on what I learned [during the event], I ...[review] the questions that were asked...”.

So participants in the event did engage in retranslating their professional identities and practices in other locations in their PLE, mobilising other technologies to enact different professional practices, in this case, reflective writing and learning, which could not be effectively enacted in Twitter.

### **Facilitating technologies**

Facilitation behaviours during these discussion events can be seen in the interactions between participants, but the facilitation of learning was also performed by the software and “platforms” (Purohit et al., 2013) of Twitter itself. Most obviously, the hashtag function acted to aggregate the Tweets as visibly contributing to the event discussions. The hashtag performed the facilitation functions of encouraging group communication, clarifying the content of discussion and organising the structure of the group. As Procter et al. (2013, p. 198) argue, the hashtag function collaborates with the event participants:

to co-create a fluid and dynamic structure within the Tweet timeline that facilitates information discovery

This co-creation is performed in ‘*real-time*’ throughout the discussion event (Small, 2011).

Similarly, the ‘@\_user mention’ functions acted to facilitate the shaping of ‘useful’ roles of participants, encourage group communication and connecting the thoughts expressed between participants. These functions were used by those key ‘networked’ individuals cited above (Figure 2) to facilitate the structural cohesion of the event community.

Thus the assemblage of the behaviour of the discussion event participants and the functions of the Twitter technologies can be seen to generate a distributed model of the facilitation of online learning.

## Conclusion

Learning spaces such as these Twitter discussion events demonstrate the competing forces of newer technologies and the related practices of social and collaborative learning against the rhetoric of learner autonomy and control found in the advocacy of PLEs (Hodgson, McConnell, & Dirckinck-Holmfeld, 2012).

While the role of the facilitator is widely seen as crucial to the success of online learning and communities, this article argues that the facilitation of these Twitter events was distributed between the technologies used and the participants in the learning community. Rather than emphasising the individual control of learning through a PLE, this notion of distributed facilitation suggests learning and identity is framed by social, participative and on-going performances of what is legitimate and illegitimate professional learning and practice.

## References

- Ala-mutka, K. (2009). *Review of Learning in ICT-enabled Networks and Communities*. Institute for Prospective Technological Studies, JRC, European Commission. EUR 2406.
- Barad, K. (2003). 'Posthumanist performativity: toward an understanding of how matter comes to matter. *Signs*, 28(3), 801–831.
- Bingham, T., & Conner, M. (2010). *The New Social Learning*. San Francisco: Berrett-Koehler Publishers, Inc.
- Bradley, A. J., & MacDonald, M. P. (2011). Social media versus knowledge management. Retrieved September 26, 2013, from <http://blogs.hbr.org/2011/10/social-media-versus-knowledge/>
- Bruns, A., & Stieglitz, S. (2013). Towards more systematic Twitter analysis: metrics for tweeting activities. *International Journal of Social Research Methodology*, 16(2), 91–108. doi:10.1080/13645579.2012.756095
- Castells, M. (2000). Materials for an exploratory theory of the network society. *The British Journal of Sociology*, 1(51), 5–24.
- Conradie, P. W. (2014). Supporting Self-Directed Learning by Connectivism and Personal Learning Environments. *International Journal of Information and Education Technology*, 4(3), 254–259. doi:10.7763/IJiet.2014.V4.408
- Donnelly, R. (2011). The coalescence between synergies and conflicts of interest in a top consultancy firm: An analysis of the implications for consultants' attitudes and behaviours. *Human Resource Management Journal*, 21(1), 60–73.
- Downes, S. (2014). Connectivism as Learning Theory. Retrieved August 18, 2014, from <http://halfanhour.blogspot.co.uk/2014/04/connectivism-as-learning-theory.html>

- Evans, P. (2014). Exploring the relationship between discourse and a practice perspective on HRD in a virtual environment. *Human Resource Development International*, 17(2), 183–202. doi:10.1080/13678868.2014.886889
- Fenwick, T., & Edwards, R. (2010). *Actor-Network Theory in Education*. London: Routledge.
- Fenwick, T., & Landri, P. (2012). Materialities, textures and pedagogies: socio-material assemblages in education. *Pedagogy, Culture & Society*, (December), 37–41.
- Fiedler, S. (2014). “Open-sourcing” personal learning. *Journal of Interactive Media in Education*, 2–3.
- Fournier, H., & Kop, R. (2010). Researching the design and development of a Personal Learning Environment. In *PLE Conference, 6-8 June*. Barcelona.
- Gnosis Media Group. (n.d.). Tweetchat Wiki/By Subject. Retrieved March 28, 2013, from [http://www.gnosisarts.com/index.php?title=Tweetchat\\_Wiki/By\\_Subject](http://www.gnosisarts.com/index.php?title=Tweetchat_Wiki/By_Subject)
- Hodgson, V., McConnell, D., & Dirckinck-Holmfeld, L. (2012). The Theory, Pedagogy and Practice of Networked Learning. In L. Dirckinck-Holmfeld, V. Hodgson, & D. McConnell (Eds.), *Exploring the Theory, Pedagogy and Practice of Network Learning* (pp. 291–305). New York, NY: Springer New York. doi:10.1007/978-1-4614-0496-5
- Kop, R. (2010). The design and development of a personal learning environment: researching the learning experience. In *European Distance and E-learning Network annual Conference 2010*. Valencia, Spain.
- Kop, R., & Hill, A. (2008). Connectivism : Learning theory of the future or vestige of the past ? *International Review of Research in Open and Distance Learning*, 9(3).
- Mäkitalo, Å. (2012). Professional learning and the materiality of social practice. *Journal of Education and Work*, (October), 37–41.

- Malcolm, I., & Plowman, L. (2014). Knowledge, technology and the professional learning of localisers. *Professions and Professionalism*, 4(1), 1–15.  
doi:<http://dx.doi.org/10.7577/pp.617>
- Marks, A., & Huzzard, T. (2010). Employability and the ICT worker: a study of employees in Scottish small businesses. *New Technology, Work and Employment*, 25(2), 167–181.  
doi:10.1111/j.1468-005X.2010.00246.x
- Mazzolini, M., & Maddison, S. (2007). When to jump in: The role of the instructor in online discussion forums. *Computers & Education*, 49(2), 193–213.  
doi:10.1016/j.compedu.2005.06.011
- McCulloch, J., McIntosh, E., & Barrett, T. (2011). *Tweeting for Teachers: how can social media support teacher professional development?*
- McInerney, P.-B. (2009). Technology Movements and the Politics of Free/Open Source Software. *Science, Technology, & Human Values*, 35(2), 206–233.
- Mutch, A. (2013). Information and Organization Sociomateriality — Taking the wrong turning ? ☆. *Information and Organization*, 23, 28–40.
- Procter, R., Vis, F., & Voss, A. (2013). Reading the riots on Twitter: methodological innovation for the analysis of big data. *International Journal of Social Research Methodology*, 16(3), 197–214. doi:10.1080/13645579.2013.774172
- Purohit, H., Hampton, A., Shalin, V. L., Sheth, A. P., Flach, J., & Bhatt, S. (2013). What kind of #conversation is Twitter? Mining #psycholinguistic cues for emergency coordination. *Computers in Human Behavior*, 29(6), 2438–2447. doi:10.1016/j.chb.2013.05.007
- Robinson, M., Anning, A., & Frost, N. (2005). When is a teacher not a teacher? Knowledge creation and the professional identity of teachers in multi-agency settings. *Studies in Continuing Education*, 27(2), 175–191.

- Rovai, A. P. (2007). Facilitating online discussions effectively. *The Internet and Higher Education*, 10(1), 77–88. doi:10.1016/j.iheduc.2006.10.001
- Scholz, T. (2013). Introduction. In *Digital Labour: the internet as playground and factory* (pp. 1–9). London: Routledge.
- Sie, R., Patariaia, N., Boursinou, E., Rajagopal, K., Falconer, I., Bitter-Rijkema, M., ... Sloep, Peter, B. (2013). Goals , Motivation for , and Outcomes of Personal Learning through Networks : Results of a Tweetstorm. *Educational Technology & Society*, 16(3), 59–75.
- Siemens, G. (2005). Connectivism: A Learning Theory for the Digital Age. *International Journal of Instructional Technology and Distance Learning*, 2(1).
- Sloep, P. B. (2014). Networked Professional Learning. In A. Littlejohn & A. Margaryan (Eds.), *Technology Enhanced Professional Learning: Processes, Practices and Tools* (pp. 97–108). London: Routledge.
- Small, T. a. (2011). What the Hashtag? *Information, Communication & Society*, 14(6), 872–895. doi:10.1080/1369118X.2011.554572
- Wagner, N., Hassanein, K., & Head, M. (2008). Who is responsible for E-Learning Success in Higher Education? A Stakeholders' Analysis. *Educational Technology & Society*, 11(3), 26–36.
- Wang, C. X., Anstadt, S., & Goldman, J. (2014). Facilitating Group Discussions in Second Life. *MERLOT Journal of Online Learning and Teaching*, 10(1), 139–152.
- Wilson, S., Liber, O., Johnson, M., Beauvoir, P., Sharples, P., & Milligan, C. (2009). Personal Learning Environments: Challenging the dominant design of educational systems. *Journal of E-Learning and Knowledge Society*, 3(2. June 2007), 27–38.



Figure 1: discussion event structure

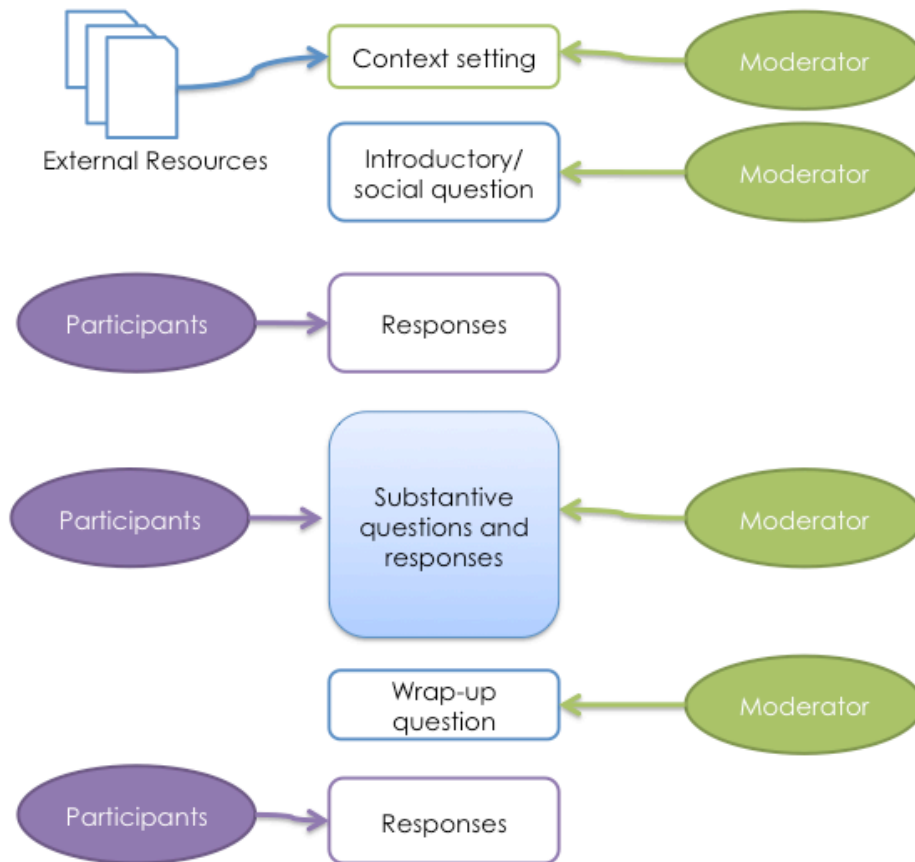


Figure 2: key participants

